

DaimlerChrysler AG

Patent claims

- 5    1.    A vehicle occupant protection system (1) for a  
         motor vehicle having a vehicle seat (2) with  
         airbags (3) which are integrated into lateral  
         areas of a seating part and of a backrest, the air  
         pressure of the airbags (3) being adjustable by  
10       means of a compressed air regulating device (4),  
         characterized in that a control unit (5) is  
         provided which evaluates the data (6) which is  
         relevant to the safety of the driving operation,  
         and times the actuation of the compressed air  
15       regulating device (4) in such a way that at least  
         one airbag (3) of the vehicle seat (2) is inflated  
         before the occurrence of an anticipated accident.
2.    The vehicle occupant protection system (1) as  
20       claimed in claim 1, characterized in that all the  
         airbags (3) of the vehicle seat are inflated  
         before the occurrence of the anticipated accident.
3.    The vehicle occupant protection system (1) as  
25       claimed in claim 1, characterized in that only  
         those airbags (3) of the vehicle seat which are  
         relevant in terms of safety equipment for the  
         specific accident are inflated.
- 30    4.    The vehicle occupant protection system (1) as  
         claimed in claim 1, characterized in that at least  
         one support element in the backrest and/or a  
         headrest has airbags (3) which are actuated by the  
         compressed air regulating device (4).
- 35       5.    The vehicle occupant protection system (1) as  
         claimed in claim 1, characterized in that the air  
         pressure of the airbag (3) is set by means of the

compressed air regulating device (4) as a function of a vehicle occupant classification means (7) and/or a person identification means (8).

- 5    6.    The vehicle occupant protection system (1) as  
         claimed in claim 1, characterized in that the air  
         pressure of the airbag (3) is set by means of the  
         compressed air regulating device (4) as a function  
         of the specific accident.
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7.    The vehicle occupant protection system (1) as  
         claimed in claim 1, characterized in that the data  
         (6) which is relevant to the safety of the driving  
         operation comprises vehicle state variables,  
15           ambient data and/or driver activities.
8.    The vehicle occupant protection system (1) as  
         claimed in claim 1, characterized in that the  
         airbag (3) is deflated if the accident does not  
20           occur.
9.    The vehicle occupant protection system (1) as  
         claimed in claim 1, characterized in that the  
         control unit (5) also actuates a reversible seat  
25           belt pretensioner (9) and activates it in good  
         time before the anticipated accident.